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BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

MEETING DATE: 9/21/05

DIVISION: COUNTY ADMINISTRATOR

BULK ITEM: YES

DEPARTMENT: AIRPORTS

STAFF CONTACT PERSON: Peter Horton

AGENDA ITEM WORDING: Approval of Purchase Service Order with THC Inc. for the Noise Insulation Program Ph 4 Construction Services, for the Key West International Airport.

ITEM BACKGROUND: This project will be funded 95 % by the Federal Aviation Administration, and 5% by Passenger Facility Charge Revenue. As required by FAA, a copy of an Independent Estimate is attached.

PREVIOUS RELEVANT BOCC ACTION: Approval to submit PFC Application # 8 to the FAA, October 15, 2003.

CONTRACT/AGREEMENT CHANGES: New PSO

STAFF RECOMMENDATION: Approval

TOTAL COST: \$382,898.00

BUDGETED: Yes

COST TO AIRPORT: None

SOURCE OF FUNDS: FAA & PFC Revenue

COST TO PFC: \$19,144.90

COST TO COUNTY: None

REVENUE PRODUCING: No

AMOUNT PER MONTH /YEAR:

APPROVED BY: County Attorney X

OMB/Purchasing N/A

Risk Management N/A

AIRPORT DIRECTOR APPROVAL



Peter J. Horton

DOCUMENTATION: Included X

Not Required

AGENDA ITEM #

DISPOSITION:

/bev
APB

MONROE COUNTY BOARD OF COUNTY COMMISSIONERS

CONTRACT SUMMARY

Contract #

Contract with: THC Inc.

Effective Date: Execution
Expiration Date: 500 days

Contract Purpose/Description: Construction services for the Noise Implementation Program Ph IV
Construction

Contract Manager: Bevette Moore
(name)

5195
(Ext.)

Airports - Stop # 5
(Department/ Stop)

for BOCC meeting on: 9/21/05

Agenda Deadline: 9/6/05

CONTRACT COSTS

Total Dollar Value of Contract: \$382,898.00

Current Year Portion: ~\$5,000.00

Budgeted? Yes

Account Codes: 404-630107-GAKA104

Grant: Yes - FAA

County Match: PFC Revenue

ADDITIONAL COSTS

Estimated Ongoing Costs: None
(not included in dollar value above)

For: .
(eg. maintenance, utilities, janitorial, salaries, etc.)

CONTRACT REVIEW

	Date In	Changes Needed Yes No	Reviewer	Date Out
Airports Director	<u>8/26/05</u>	() ()	<u>PTH</u> Peter Horton	<u>8/26/05</u>
Risk Management	<u> / / </u>	() ()	<u>N/A Pa OMB</u> for Risk Management	<u> / / </u>
O.M.B./Purchasing	<u> / / </u>	() ()	<u>N/A Pa OMB</u> for OMB	<u> / / </u>
County Attorney	<u> / / </u>	() ()	<u>Pedro Mercado</u> County Attorney	<u> / / </u>

Comments: _____

PROFESSIONAL / SERVICE ORDER

FOR

MONROE COUNTY

To: THC, Inc.

Professional Service Order No. 3

Re: PSO Agreement, Dated 10-15-03

Resolution No. _____

Project Name: Implementation of Noise Insulation Program – (Phase 4 Construction Services)

Description of Services:

(See attached Scope of Services)

Multiple of Direct Salaries _____

Lump Sum X

Days to Complete 500

Reimbursable Expense _____

Fee this Service Order \$382,898.00

Payment for Services shall be in their entirety as per PSO.

Prepared by:

Joe Co 11

Recommended by:

[Signature]

Date: 8-22-05

Date: 8-23-05

Accepted by:

Joe Co 11

Approved by:

Date: 8-22-05

Date: _____

MONROE COUNTY ATTORNEY

APPROVED AS TO FORM:

[Signature]
PEDRO J. MERCADO
ASSISTANT COUNTY ATTORNEY

KWIA Phase 4 CM Budget

Task	Task Description	Lump-Sum Amount
1	Project Management	\$ 87,792.00
2	Conduct Pre-construction Tasks and Conference	\$ 35,455.00
3	Construction Period Management	
3a	Maintain Project Office and Provide Information to the Public	\$ 5,225.00
3b	Conduct Contractor Walk-through	\$ 12,580.00
3c	Provide Construction Phase Services	\$ 141,210.00
3d	Conduct Final Inspections	\$ 5,225.00
3e	Evaluate and Close-out Project	\$ 2,420.00
	TOTAL TASK 3	\$ 166,660.00
4	Conduct Post-modification Noise Test and Prepare Final Report	\$ 13,550.00
	Reimbursable Expenses	\$ 79,441.00
	TOTAL PSO #3 BUDGET	\$ 382,898.00

PHASE 4 CONSTRUCTION SCOPE OF SERVICES IMPLEMENTATION OF NOISE INSULATION PROGRAM KEY WEST INTERNATIONAL AIRPORT

This Scope of Services will describe tasks necessary to implement the Noise Insulation Program for Phase 4 Construction Services. The services will include preliminary construction tasks through project close-out. It is anticipated that this phase will require the construction management of fifty-five (55) homes to be sound insulated.

The THC Director of Sound Insulation Programs is the ultimate party of responsibility for THC, Inc., and will provide program management consultation throughout the 12 month period. The Consultant Team will be directed on a daily basis by a THC Project Manager who will report directly to the Key West International Airport's Noise Program Coordinator and the THC Director of Sound Insulation Programs. It is anticipated that the actual construction period will consist of 10 months within the 12 month project timetable.

The Consultant Team is composed of the following disciplines. Their billable rates are shown in parenthesis:

- **THC, Inc.** - The Program Manager, THC, Inc. (THC) will provide overall program management services. THC will provide support to the Airport Noise Program Coordinator. THC will provide database services and project scheduling, along with interaction with all participating property owners and tenants. The Director of Sound Insulation Programs (\$182.00) will have overall responsibility for the project and provide master planning, document review and development, scheduling and overall program management throughout the project. THC will also assign a Project Manager (\$102.00) to the project for the entire construction phase, which will travel back and forth from Atlanta to Key West on a periodic basis. THC will also utilize the services of an Assistant to the Project Manager (\$68.00) for administrative work from the Atlanta headquarters office.
- **Miller-Dunwiddie Architects** - The Construction Management firm (Miller Dunwiddie Architects) (MDA) will provide a full-time Construction Manager (\$95.00) on-site for the 10 month construction period. MDA will also utilize the services of the Principal Architect (\$165.00), and project oversight from the Construction Services Director (\$180.00).
- **The Sun Group** - MDA will also utilize the services of The Sun Group to provide architectural assistance during the construction management process. When required by either THC or MDA, The Sun Group's responsibilities will include providing design clarification, assisting in the evaluation of unforeseen site issues, providing field clarifications, reviewing shop drawings and providing change order review. In addition, The Sun Group will provide clarification of the construction specification language to the Program Manager and Construction Contractor. The Sun Group will utilize the services of the Project Architect (\$130.00) and a CADD Technician (\$70.00).

- **Landrum & Brown** - The Acoustical Engineer, Landrum & Brown (L&B) will provide "post" modification noise testing in homes previously "pre" tested during the design phase (approximately eight (8) homes). L&B will utilize a Senior Consultant (\$210.00), two Consultants (both rates are \$140.00) and an Administrative Assistant (\$65.00) on this project.

Travel

This section explains the travel budgeting for the THC Consultant Team. Each task has a travel section following the task description where appropriate. If there is no travel section following a task description, then there is no travel planned for this task. The following information explains the number of trips planned and the allotted days, nights and budgeted costs for each member of the various companies represented on the consultant team.

THC has budgeted four (4) trips for the Project Manager and two (2) trips for the Director of Sound Insulation Programs, for a total of six (6) trips. These trips include four (4) nights, five (5) day stays for the Project Manager, and two (2) nights, three (3) day stays for the Director of Sound Insulation Programs, each trip. Where other tasks require trips for the Project Manager, they will be absorbed into the four (4) trips budgeted so that more than one task can be addressed by the Project Manager during the same trip. All trips budgeted for THC are scheduled as non-stop, round trip flights from Atlanta, GA to Key West. Round trip airfare is budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$40.00 per day. Per diem is budgeted at \$40.00 per day.

MDA will place the Construction Manager on-site for the duration of the construction period, which is forecast to be ten (10) months. The Construction Manager will drive his vehicle from Minneapolis to Key West so as to save on the cost of auto rental during this ten month period. One way mileage is estimated at 1,600 miles. A mileage charge of \$.405 per mile, for a total of 3,200 miles, is included in the MDA reimbursable expense budget.

MDA has budgeted eleven (11) trips for the Construction Manager and four (4) trips for the Construction Services Director, for a total of fifteen (15) trips. One (1) trip of the Construction Manager's trips is prior to the 10 month construction period where the Construction Manager is living on site in Key West. That one trip is scheduled for a two (2) night, three (3) day stay at a hotel (\$140.00 per night). That one trip also includes a rental car at \$40.00 per day, since this is prior to the Construction Manager's on-site residency in Key West, and a \$40.00 per diem for the three (3) days. The remaining ten (10) trips budgeted for the Construction Manager are scheduled during his 10 month construction period residency. There are no trips budgeted for the Principal Architect for MDA.

The four (4) trips scheduled for the Construction Services Director are budgeted for two (2) nights, three (3) day stays per trip. All trips budgeted for MDA are scheduled from Minneapolis, MN to Key West and budgeted at \$1,400.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$40.00 per day. Per diem is budgeted at \$40.00 per day.

The Sun Group will serve as a sub-consultant to MDA on this project. MDA has also budgeted for three (3) trips for The Sun Group. These are forecast to be two (2) night, three (3) day trips. All trips budgeted for The Sun Group are scheduled from West Palm Beach, FL to Key West and budgeted at \$705.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$40.00 per day. Per diem is budgeted at \$40.00 per day. All project related work from The Sun Group will be performed by the Project Architect, except for CADD related tasks which will be provided by a Sun Group CADD Technician.

The Acoustical Engineer, Landrum & Brown, has budgeted for one (1) trip for two (2) employees (total of two (2) trips) for post modification noise testing in the field. These two employees (Consultant 1 and Consultant 2) will spend two (2) nights and three (3) days in Key West. All trips budgeted for Landrum & Brown are scheduled from Boston, MA to Key West and budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$70.00 per day (only one vehicle budgeted for both Consultants) due to the L&B employees needing a van to accommodate the noise testing equipment. Per diem is budgeted at \$40.00 per day for each Consultant.

Also included in the expense budget for L&B are expenses associated with their noise testing equipment. These include the fee for use of their noise testing equipment, the LD824, at \$200.00, and the shipping expenses associated with transporting this equipment at \$280.00.

Travel Summary for the Project

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	2
THC	Program Manager	4
MDA	Construction Services Director	4
MDA	Construction Manager	11
Sun Group	Project Architect	3
L&B	Consultant 1	1
L&B	Consultant 2	1

Other Expenses

The MDA expense budget also includes an amount of \$650.00 per month for various office expenses during the 10 month construction period. The MDA expense budget also includes a housing expense of \$3,200.00 per month for the Construction Manager

during the 10 month construction period. There are no per diem charges or rental car charges budgeted for the Construction Manager during the 10 month construction period.

Project Tasks

There are four (4) tasks associated with the Phase 4 Construction Management project. There are 5 sub-tasks of Task 3. They are:

- 1) Project management
- 2) Conduct Pre-construction tasks and conference
- 3) Construction period management
 - a. Maintain Project Office and Provide Information to the Public
 - b. Conduct Contractor Walk-Through
 - c. Provide Construction Phase Services
 - d. Conduct Final Inspections
 - e. Evaluate and Close-out Project
- 4) Conduct post-modification noise test and prepare final report

TASK 1 PROJECT MANAGEMENT

THC will perform general project-related management and coordination with the Airport Noise Program Coordinator. This task includes preparation of monthly invoices and progress reports, FAA coordination as necessary, project management plan updates, sub-consultant coordination and management, and schedule updates. The Project Manager will travel to the project site as necessary for coordination with the participating homeowners, the airport staff, and the various members of the consultant team. The Project Manager will also provide services off-site on a continuing basis. The Project Manager will always be available for interaction as circumstances arise. Since Project Management encompasses the entire project, **100% of the THC employees' hours are included in this task as follows:**

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	96	\$182.00
Project Manager	384	\$102.00
Assistant to Project Manager	144	\$68.00

This task also includes conference calls with the Consultant Team and related documentation. MDA, The Sun Group and L&B will perform general project-related coordination with the THC Project Manager. This includes preparation of monthly invoices and progress reports, FAA coordination as necessary, and schedule updates.

Miller-Dunwiddie (MDA) employees will assist THC in the program management due to their key role in the construction management task. The MDA Principal Architect will have corporate responsibility for MDA on this project. He will utilize the services of the MDA Construction Services Director to oversee MDA performance on this project. The MDA Construction Manager will provide daily construction inspections and a continuous analysis of contractor performance and report directly to the Construction Services Director, and the THC Project Manager. **This task includes 100% of the MDA Principal Architect's hours, and approximately 52% of the MDA Construction Services Director's hours.** The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Principal Architect	16	\$165.00
Construction Services Director	104	\$180.00

The MDA Construction Manager will coordinate and direct the contractor's daily on-site performance and direct all change orders and/or changes to the scope of work. The Construction Manager will coordinate change order requests with the Project Architect (The Sun Group) as necessary. This task also includes coordination with the airport, as well as weekly conference calls with the Consultant Team and related documentation. The Construction Manager will perform general project-related coordination with the THC Project Manager. This includes preparation of monthly invoices and progress reports, and schedule updates. **There are no hours shown for the Construction Manager under this task.**

There are no hours budgeted for L&B or The Sun Group under this task.

Travel Summary for this Task

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	2
THC	Program Manager	4
MDA	Construction Services Director	2

TASK 2 CONDUCT PRE-CONSTRUCTION TASKS & CONFERENCE

Prior to the construction period, the MDA Construction Services Director and Construction Manager, along with the Project Architect from The Sun Group, will conduct pre-construction tasks and document the Pre-Construction Conference. This will require a review of the scope of work and the coordination plan. The Sun Group will make all necessary revisions to the Phase 4 NIP Construction Specifications, including technical specifications, architectural details and shop drawing review. This will also require some time from a CADD Technician from The Sun Group. The CADD Technician's time will be provided from the offices of The Sun Group in West Palm Beach, FL, and therefore will not require travel to the project site. The Sun Group and

MDA will review all administrative procedures and performance requirements with the contractors. The Project Architect and the Construction Manager will acquaint contractor personnel with the detailed requirements of noise insulation design. **Approximately 1% of the Construction Services Director's hours are included in this task. Approximately 5.5% of the Construction Manager's hours are included in this task.** The summary of hours for MDA is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Services Director	24	\$180.00
Construction Manager	80	\$95.00

100% of The Sun Group CADD Technician hours are included in this task. Approximately 57% of The Sun Group Principal Architect's hours are included in this task. The summary of hours for The Sun Group is as follows:

Summary of Hours – SUN GROUP

Position	Hours	Hourly Rate
Project Architect	170	\$130.00
CADD Technician	20.5	\$70.00

The Construction Services Director, the Construction Manager and the Project Architect will all attend the Pre-Construction Conference. The Project Manager and the Director of Sound Insulation Programs will attend if necessary (all travel expenses are provided for THC personnel under Task A). The Pre-Construction Conference will cover the following material:

- Purpose of the project;
- Goals to be achieved;
- Homeowner interaction and sensitivity training;
- Simplified description of noise transmission into buildings;
- Noise insulation treatments;
- Submittal requirements;
- Scheduling and phasing of trades;
- Level of workmanship;
- Coordination requirements;
- Progress payments;
- Requisitions and change orders;
- Final closeout documentation requirements.

Travel Summary for this Task

Company	Position	No. of Trips
MDA	Construction Services Director	1
MDA	Construction Manager	1
Sun Group	Project Architect	1

TASK 3 CONSTRUCTION PERIOD MANAGEMENT

There are several tasks that take place during the same general period of time and/or simultaneously during the Construction Period. The balance of the hours for the Construction Services Director (MDA), Construction Manager (MDA) and Project Architect (Sun Group) are budgeted for Task 3. These hours are spread out among the sub-tasks of this section. The following sub-tasks all fall under Task 3 Construction Period Management.

3A. MAINTAIN PROJECT OFFICE AND PROVIDE INFORMATION TO THE PUBLIC

The Consultant's Project Manager (THC), Project Architect (Sun Group) and Construction Manager (MDA) will answer inquiries from and provide information to the public, the media, and the County as appropriate. They will support the Airport Noise Program Coordinator in conducting daily program implementation. The Construction Services Director (MDA) will also provide assistance to the Construction Manager during this task.

As directed by the Airport Noise Program Coordinator, either the Construction Manager (MDA) or the Project Manager (THC) will attend the airport's Ad-Hoc Committee meetings on noise to provide status reports on the progress of the Noise Insulation Program and other related matters during the term of this phase. The Project Manager will attend if in town for project related tasks. They will provide status reports on the progress of the Noise Insulation Program and other related matters. The Construction Manager will also attend project management meetings as necessary in Key West, to coordinate with THC and the Airport Noise Program Coordinator regarding the overall construction management of the project.

Approximately 3.5% of the Construction Manager's hours are included in this task. The summary of hours is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Manager	55	\$95.00

3B. CONDUCT CONTRACTOR WALK-THROUGH

The Construction Manager will conduct the walk-through of the homes. The Construction Manager will work with the THC Project Manager to coordinate these inspections with the homeowners. This walk-through will involve the following:

- Product Measurements – The contractor and manufacturer representatives, if present, will measure the window and door openings for ordering and manufacturing the designated products.

- Review of Installation Details – The contractor must review the existing condition of the window and door openings.
- Verification of Homeowner Pre-Work Completion - The Construction Manager will, along with the Airport Noise Program Coordinator, inspect items listed in the contract documents as Homeowner pre-work for satisfactory resolution. Where necessary, the Construction Manager, along with the Airport Noise Program Coordinator, will address these issues with the Homeowner.
- Verification of Finishes, Colors and Styles – The Construction Manager, along with the Airport Noise Program Coordinator, will verify with the Homeowner the product selection styles, colors and finishes, the window grille configuration (if applicable), and the location of the air condensing unit (if applicable).
- Construction Survey Form - The Construction Manager, along with the Airport Noise Program Coordinator, will complete the Construction Survey with the Homeowner.

Approximately 15% of the Construction Services Director's hours are included in this task. Approximately 2.5% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Services Director	30	\$180.00
Construction Manager	40	\$95.00

Approximately 8.5% of The Sun Group Principal Architect's hours are included in this task. The summary of hours for The Sun Group is as follows:

Summary of Hours – SUN GROUP

Position	Hours	Hourly Rate
Project Architect	26	\$130.00

Travel Summary for this Task

Company	Position	No. of Trips
MDA	Construction Services Director	1
Sun Group	Project Architect	1

3c. PROVIDE CONSTRUCTION PHASE SERVICES

The Construction Manager will provide construction observation services and conduct daily field inspections to help ensure quality control. He will consult with the Construction Services Director for guidance and assistance throughout this phase. If change orders are necessary, the Construction Manager will secure the approval of the airport and the FAA prior to approving any major changes to the contract. The Construction Manager will utilize The Sun Group Project Architect to assist in the

administration and completion of all necessary change orders, review and approval of shop drawings, and review and approval of materials and products. The Project Architect will travel to the project site for these tasks as needed. The tasks involved in construction administration include the following:

- Review and process all submittals and shop drawings that are required by the Specifications.
- Review materials before they are installed to ensure that they comply with approved submittals.
- Review work covered by shop drawings to ensure that it complies with Contract Documents.
- Conduct daily inspections at each site that is under construction.
- Coordinate with the Contractors to insure all appropriate building permits have been secured.
- Observe work in progress to verify that it meets the requirements and intent of the Contract Documents.
- Attend, conduct, and document weekly construction progress meetings with the contractors and subcontractors.
- Notify the General Contractor of any part of the work in progress that does not conform to approved submittals, shop drawings, or Contract Documents.
- Consider and evaluate the Contractor's suggestions for modifications to the Contract Documents.
- Maintain files and records of all pertinent documents including submittals, shop drawings, addenda, minutes of meetings and reports.
- Review applications for payment to ensure that they agree with the work actually done and materials actually received.
- Prepare punch lists at the appropriate time for each unit, distribute the lists to the General Contractor for execution, verify that punch list items are complete, and then certify the General Contractor's final invoice for payment.

The Construction Manager will write daily reports for up to 40 weeks to perform the tasks described above. It is planned that 40 weeks will be adequate to complete construction activities with a maximum of 10 houses per each sub-construction period for the duration of Phase 4.

Approximately 21% of the Construction Services Director's hours are included in this task. Approximately 83.5% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Services Director	42	\$180.00
Construction Manager	1270	\$95.00

Approximately 33.5% of The Sun Group Principal Architect's hours are included in this task. The summary of hours for The Sun Group is as follows:

Summary of Hours – SUN GROUP

Position	Hours	Hourly Rate
Project Architect	100	\$130.00

Travel Summary for this Task

Company	Position	No. of Trips
MDA	Construction Manager	10
Sun Group	Project Architect	1

3D. CONDUCT FINAL INSPECTIONS

Once the outstanding punch list items for a particular house are completed, the Construction Manager will conduct a final inspection of that house. The Construction Manager will verify that all items identified on the punch list have been addressed, that all work has been performed in accordance with the contract plans and specifications, and that the work meets project standards for workmanship and quality.

The Construction Manager and the THC Project Manager will schedule and perform the final inspections with the Homeowners.

Approximately 3.5% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Manager	55	\$95.00

3E. EVALUATE AND CLOSE-OUT PROJECT

The Construction Manager will prepare a full technical assessment of performance and achievements, including the following:

- The adequacy of technical specifications.
- Project revisions required, if necessary, to the technical specifications in order to achieve the Project objectives.
- An evaluation of the predicted versus the actual costs for modifications.
- Contract schedule compliance.
- Full cost accounting including Bid cost and Change Order Request evaluation.

The Project Architect will assist the construction Manager in the close-out of the project.

Approximately 1.5% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Construction Manager	20	\$95.00

Approximately 1% of The Sun Group Principal Architect's hours are included in this task. The summary of hours for The Sun Group is as follows:

Summary of Hours – SUN GROUP

Position	Hours	Hourly Rate
Project Architect	4	\$130.00

TASK 4 CONDUCT POST - MODIFICATION NOISE TEST AND PREPARE FINAL REPORT

The Acoustical Engineer will conduct post-modification noise audits of the homes that were pre-tested during the design phase (approximately eight (8) homes). Pre-modification data will be compared with post-modification measurements to document the achieved increase in noise reduction, and as a check on quality control. L&B will utilize the services of two consultants to perform this task on-site. The Senior Consultant for L&B will analyze the information and document the results in a final report. He will utilize the services of an Administrative Assistant to complete the report. **All L&B employees' hours are included in this task. This includes the Senior Consultant, Consultant 1, Consultant 2 and the Administrative Assistant.**

Summary of Hours – L&B

Position	Hours	Hourly Rate
Senior Consultant	4	\$205.00
Consultant 1	58	\$140.00
Consultant 2	32	\$140.00
Administrative Assistant	2	\$65.00

The noise level reduction (NLR) measurements essentially consist of placing a loudspeaker inside each of the rooms that will be measured. The electrical signal of a pink noise source is fed through the amplification/loudspeaker system and is filtered to simulate aircraft noise. The consultants will measure the average interior sound level within the room and the sound level directly outside each exterior element (i.e., doors, windows, and walls). An overall NLR will be mathematically computed based on the measured test data and the acoustical conditions of each room.

Travel Summary for this Task

Company	Position	No. of Trips
L&B	Consultant 1	1
L&B	Consultant 2	1

IKE

INDEPENDENT KOST ESTIMATES

P. O. Box 46681
St. Pete Beach
Florida 33741

(727) 367-2910

July 3, 2005

Ms. Bevette Moore
Business Coordinator
Airports Business Office
3491 S. Roosevelt Boulevard
Key West, Florida 33040

Subject: Key West International Airport
Consultant Fee Assessment

Dear Ms. Moore:

Per our agreement, attached is my assessment of the consultant fees for the proposed AIP Project (Phase 4 Construction Services, Implementation of Noise Insulation Program) at Key West International Airport. This estimate covers all tasks which are included in the scope of services for this project.

The estimated consultant fee for the proposed project is \$394,360.

I am also attaching an invoice for \$1,000 for my services.

Please do not hesitate to call should you have any questions regarding my assessment.

Thank you for giving me the opportunity to prepare this estimate. If I can be of any service in the future, please let me know.

Sincerely,

Ike A. Cakarnis
Ikars (Ike) A. Cakarnis
Airport Engineer

Attachments

July 3, 2005

KEY WEST INTERNATIONAL AIRPORT
PHASE 4 CONSTRUCTION SERVICES
IMPLEMENTATION OF NOISE INSULATION PROGRAM

INDEPENDENT COST ESTIMATE

SUMMARY OF CONSULTANT FEE ESTIMATE

1. Project Management	\$ 93,430
2. Conduct Pre-Construction Tasks & Conference	\$ 35,440
3. Construction Period Management	
3A. Maintain Project Office & Provide Information to the Public	\$ 5,700
3B. Conduct Contractor Walk-Through	\$ 12,670
3C. Provide Construction Phase Services	\$ 146,690
3D. Conduct Final Inspection	\$ 5,230
3E. Evaluate & Close-Out Project	\$ 2,800
4. Conduct Post-Modification Noise Test & Prepare Final Report	\$ 13,400
5. Direct Costs	\$ 79,000
TOTAL	\$ 394,360

1. Project Management

	<u>Hours</u>	<u>Rate</u>	<u>Cost</u>
Director SIP (THC)	96	\$ 182	\$ 17,472
Project Manager	400	102	40,800
Assistant to PM	120	68	8,160
Const. Serv. Dir. (MDA)	128	180	23,040
Principal Architect	24	165	3,960

TOTAL

\$ 93,430

2. Conduct Pre-Construction Tasks & Conference

	<u>Hours</u>	<u>Rate</u>	<u>Cost</u>
Const. Service Dir. (MDA)	24	\$ 180	\$ 4,320
Construction Manager	64	95	6,080
Proj. Architect (Sun Group)	184	130	23,920
CADD Technician	16	70	1,120

TOTAL \$ 35,440

3. Construction Period Management

3A. Maintain Project Office & Provide Information to the Public

Construction Mgr. (MDA)	60	\$ 95	\$ 5,700
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TOTAL \$ 5,700

3B. Conduct Contractor Walk-Through

Const. Service Dir. (MDA)	24	\$ 180	\$ 4,320
Construction Manager	55	95	5,225
Project Architect (Sun Group)	24	130	3,120

TOTAL \$ 12,670

3C. Provide Construction Phase Service

Const. Service Dir. (MDA)	40	\$ 180	\$ 7,200
Construction Manager	1,326	95	125,970
Proj. Architect (Sun Group)	104	130	13,520

TOTAL \$ 146,690

3D. Conduct Final Inspection

Const. Manager (MDA)	55	\$ 95	\$ 5,225
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TOTAL \$ 5,230

3E. Evaluate and Close-Out Project

	<u>Hours</u>	<u>Rate</u>	<u>Cost</u>
Const. Manager (MDA)	24	\$.95	\$ 2,280
Project Architect (Sun Group)	4	130	520
TOTAL			\$ 2,800

4. Conduct Posts-Modification Noise Test & Prepare Final Report

Senior Consultant (L&B)	4	\$ 205	\$ 820
Consultant	88	140	12,320
Admin. Assistant	4	65	260
TOTAL			\$ 13,400

5. Direct Costs

A. Transportation

1) Airline Tickets

Atlanta - Key West	6 x	\$ 750	\$ 4,500
Minneapolis - Key West	15x	1,400	21,000
W. Palm Bh. - Key West	3x	550	1,650
Boston - Key West	2 x	750	1,500

Sub-Total \$ 28,650

2) Rental Car & Rental Van

50 days x \$40/day	\$ 2,000
3 days x \$70/day	210
Total	\$ 2,210

3) POV

3,200 miles X \$0.405/mile \$ 1,300

Total Transportation \$ 32,160

B. Lodging

40 nights x \$140/night \$ 5,600

C. Per Diem 56 days x \$40/day	\$ 2,240
D. Housing Expense - Construction Manager 10 months x \$3,200/month	\$ 32,000
E. Office Expenses - Construction Manager 10 months x \$650/month	\$ 6,500
F Noise Testing Equipment (L&B)	\$ 500
TOTAL DIRECT COSTS	\$ 79,000